REMARKS

Claims 1 through 40 are in the application, but only claims 1, 7-9, 13, 14, 20-27, 35 and 39 are now presented for examination, since claims 2-6, 10-12, 15-19, 18-34, 36-38 and 40 have been withdrawn from consideration as directed to non-elected inventions. Claims 9 and 14 have been amended, but no substantive claim amendments are made herein, and no new matter has been introduced. Claims 1, 20, 35 and 39 are the independent claims herein. Reconsideration and further examination are respectfully requested.

Claim Rejections – 35 USC § 112

It is believed that the pending rejections of claims 9 and 14 under § 112, second paragraph, have been overcome by the above-noted amendments to those claims.

Claim Rejections – 35 USC § 101

Claims 1, 7, 9, 13-14, 20 and 22-27 are rejected under 35 U.S.C. 101 on the alleged ground that the claimed invention lacks patentable utility. Applicants respectfully traverse this rejection.

Applicants will first discuss this rejection in the context of claim 1. Claim 1 is directed to a "method" that includes "identifying an option limit order". Claim 1 specifies that the option limit order "includ[es] information identifying a customer, information identifying a desired option, and information that indicates a limit price for said option limit order". The method recited in claim 1 further includes "receiving a substantially real time feed of option market data" and "using the option market data in real time to identify at least one of a trade-through transaction relevant to said option limit order and a trade-at transaction relevant to said option limit order".

Practical, useful applications of the method of claim 1 are described as follows in the specification of the present application:[1]

[1] At page 8, lines 19-23.

> In some embodiments, a number of execution quality and analysis reports may be generated based on the detection of trade-through and/or trade-at transactions and/or based on alerts [based on detection of such transactions] that were generated as described above. This may allow the broker and the broker's customers to monitor and summarize option limit order trading activity and quality.

The specification of the present application further explains[2] that detection of trade-through and/or trade-at transactions makes it possible "to obtain a performance or satisfaction measurement that may indicate an extent to which a limit order protection guarantee has been satisfied".

All of the above are "real-world" uses for the claimed invention.

Indeed, applicants submit that the present rejection under § 101 defies common sense. If the claimed invention is "useless", as the present Office Action contends, why then would the assignee hereof, a multi-billion dollar financial institution, expend time and money to develop and patent the invention?[3] In fact, the applicants' and the assignee's entirely rational and practical reasons for developing this invention are evidenced by the above descriptions of the invention's utility, and by the description at page 2, line 28 to page 3, line 14 of the specification of the practical problem to which the invention is addressed (namely difficulties for options customers in obtaining best execution of their orders and assessing the performance of their brokers).

But still more compellingly, the instant rejection under § 101--for which no authority is cited[4]--is inconsistent with the holding of the Court of Appeals for the Federal Circuit in *State Street Bank & Trust Company v. Signature Financial Group, Inc.*,[5] still the leading case on the application of § 101 to inventions of this kind.

The claimed invention in *State Street* involved the application of a mathematical algorithm to manage a new form of financial structure. The Federal Circuit held that

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[2] At page 26, line 28 to page 27, line 4.

[3] ...if applicants may be allowed to let some air into the conventionally hermetic world of § 101 discourse.

[4] Applicants see no support in the MPEP for lack-of-utility rejections like this one.

[5] 149 F.3d 1368 (Fed.Cir. 1998).

> the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result"--a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.[6]

There is no principled basis for distinguishing the gathering of trade-through or trade-at transaction information that is recited in claim 1 from the share price calculations held statutory in *State Street*. Both are concerned with financial matters and are useful in operation of financial institutions. As noted above, the data produced by the method of claim 1 allows brokers and/or their customers to monitor the brokers' performance. No less than the share price calculation in *State Street*, this is "a useful, concrete and tangible result". *State Street* clearly stands for the proposition that calculations that are performed in connection with financial operations constitute patentable subject matter. The gathering of data to allow for such calculations is no less "useful, concrete and tangible". The pending rejection of claim 1 is contrary to the prevailing case law and should be withdrawn.

Further, viewing the whole issue from a wider angle, don't option limit orders, and trade-at and trade-through transactions, all fall within the ambit of "anything under the sun that is made by man"?[7] The PTO's adverse findings as to "utility" in cases of this sort are redolent of a *sub rosa* attempt to reinstate the "business method" rejection, rightly laid to rest in *State Street*.[8] More fundamentally, the PTO's assertion of lack of utility with respect to inventions of this type conflicts with the Supreme Court's broad reading of § 101 in *Chakrabarty* and in *Diamond v. Diehr*.[9]

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[6] 149 F.3d at 1373.

[7] *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980).

[8] And are reminiscent of the discredited "technological arts" requirement struck down by the Board of Appeals in the *Lundgren* case (Appeal No. 2003-2088 (2005)).

[9] 450 U.S. 175 (1981).

The PTO would be well advised to cease concocting new *in limine* obstacles for applicants.[10] Rather, the PTO would most effectively serve its statutory mandate if it were to concentrate on applying §§ 102 and 103 to the claim language, and to abandon its pursuit of chimerical notions of non-statutory subject matter.

The above discussion of § 101 with respect to claim 1 is at least equally applicable to the other claims subject to this rejection. If anything, claim 20--the other independent claim rejected on this ground--is even more closely analogous to the calculations held "useful" in *State Street* in that claim 20 recites tabulating order fulfillment data and trade-at or trade-through data and comparing the trade-at or trade-through data to the fulfillment data. It remains entirely unclear to applicants why the PTO purports to find such activities as lacking in utility. The following reality check would be in order: Does not the claimed invention's potential for enhancing profitable financial activity *ipso facto* imply that it is "useful"? The PTO does itself no credit, and performs no useful function, in second-guessing applicants on the usefulness of their claimed inventions. It is time for the PTO to emerge from its
§ 101 ivory tower, and to recognize that its attempt to promulgate a "usefulness" standard for business method inventions is divorced from the realities of the marketplace, as well as being contrary to the letter and spirit of relevant case law.

Claim Rejections – 35 USC § 102

Claims 1, 7, 9, 13-14, 20, 22-27, 35 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Nordlicht et al. U.S. Patent Application Publication No. 2002/0194115 (hereinafter "Nordlicht"). Applicants respectfully traverse this rejection, as well.

Applicants will initially focus on claim 1, and particularly the claim limitation of "using the option market data in real time to identify at least one of a trade-through transaction relevant to said option limit order and a trade-at transaction relevant to said option limit order". It is critical to note that the terms "trade-through transaction relevant to said option limit" and "trade-

[10] Or surreptitiously resurrecting old obstacles.

at transaction relevant to said option limit order" are specifically defined in the specification of this application.[11] In particular, it is a crucial part of the definition of such transactions that the same "[occur] at an exchange other than the exchange to which the option limit order was forwarded for execution". As so defined, the trade-at and trade-through transactions are totally different from any transaction discussed in the Nordlicht reference. In fact, when this definition of trade-through and trade-at transactions is kept in mind, it becomes apparent that the Nordlicht reference has little relevance to the claimed invention.

Nordlicht states its main aim as providing "an electronic order system that provides human market participants with the feel of an exchange floor with the convenience of computerized organization".[12] Contrary to the present invention, Nordlicht is not concerned with, and does not address, the issue of the quality of order execution in a fragmented market environment formed from several unlinked exchanges.[13] More to the point, Nordlicht shows only a single market server 101, which serves as a virtual central market; the reference makes no mention of any other exchange or market beyond market server 101. Consequently, Nordlicht does not and cannot teach or suggest the concept of trade-through or trade-at transactions that are relevant to an order and occur at a different exchange from the exchange to which the order was forwarded for execution. In short, Nordlicht has essentially no bearing at all with respect to the claim limitation of identifying a trade-at or trade-through transaction. It is therefore respectfully submitted that the rejection of claim 1 be reconsidered and withdrawn.

The above discussion of claim 1 is also pertinent to claim 20. This is because claim 20 contains the limitation, "at least one of trade-through data and trade-at data for the plurality of option limit orders". This phrase is effectively defined[14] so as to derive its meaning from the above-noted terms "trade-through transaction relevant to an option limit order" and "trade-at transaction relevant to an option limit order". Thus, for reasons described in the previous paragraph, Nordlicht has essentially no relevance to this limitation of claim 20. The rejection of claim 20 therefore also should be reconsidered and withdrawn.

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[11] At page 6, line 29 to page 7, line 10.

[12] Page 1, paragraph 6, last sentence.

[13] See page 3, lines 9-14, of the specification of the present application.

The other independent claims now presented for consideration--which are claims 35 and 39--are believed to be allowable on the same basis as claim 20.

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Claims 8 and 21 are submitted as patentable on the same basis as their parent independent claims.

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Claim 1 is the parent claim of, and hence generic to, claims 2-6 and 10-12, which are not currently presented for consideration. Because claim 1 is believed to be allowable, such is also the case for claims 2-6, 10-12, which should be considered at this point solely for the purpose of allowing those claims together with their parent claim 1.

[14] At page 7, lines 12-18 of the specification of this application.

CONCLUSION

Accordingly, Applicants respectfully request allowance of the pending claims. If any issues remain, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is kindly invited to contact the undersigned via telephone at (203) 972-3460.

Respectfully submitted,

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Date

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